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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,321	10/18/2001	Yanling Zhou	211598US2	1536
22850	7590 03/03/2003			
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER	
			PAIK, SANG YEOP	
			ART UNIT	PAPER NUMBER
*			3742	
			DATE MAILED: 03/03/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	L L	· · · · · · · · · · · · · · · · · · ·						
Examiner Sang Y Paik 3742 - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Educations of time may be available under the provisione of 37 CFR 1.08(a). In no event, however, may a reply be timely filled If the period for reply specified above, the maximum stabutory period well apply and will again a reply and timely filled If the period for reply specified above, the maximum stabutory period will apply and will again EXRO, MONTHO from the mailing date of this communication, event if timely filled. If the period for reply specified above, the maximum stabutory period will apply and will again EXRO, MONTHO from the mailing date of this communication, event if timely filled, may reduce any searched plants term adjustment. See 37 CFR 1.70(b). Status 1) Responsive to communication(s) filled on @February. 2002 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for alliovance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-29 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 1-29 is/are rejected. 7) Claim(s) 1-29 is/are rejected. 7) Claim(s) 1-29 is/are rejected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filled on is/are is/are objected to by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The cath or declaration is objected to by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The cath or declaration is objected to by the Examiner. If approved, corrected drawi			Application No.	Applicant(s)				
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Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.75(a). In no event, however, may a reply be timely filled. Extensions of time may be available under the provisions of 37 CFR 1.75(a). In no event, however, may a reply be timely filled. Extensions of time may be available under the provisions of 37 CFR 1.75(a). In no event, however, may a reply be timely filled. Extensions of time may be available under the provisions of 37 CFR 1.75(a). If No period for reply is specified above, the maximum statutory period will apply and will acquire 31X (b) MONTHS from the maining date of this communication. Failuse to require which the end of certain period for reply will be the certain the statutory maintained to the communication. Failuse to reply which the set or extended period for reply will, by statute, cause the application CD (31.05. 2) 1330. Extensions of the statute of the communication (a) the communication, even if timely filled, may rectice at the communication. Failuse to replication is FINAL. 2D) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) is/are endough in the application. 4) Claim(s) is/are endough in the application and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. Application Papers 9) The proposed drawing correction filed on is/are: a) accepted or b) objected to by the Examiner. Application Papers 9) The proposed drawing correction filed on is/are: a) cepted or the provision of the								
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Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152)	a	a) The translation of the foreign language provisional application has been received.						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)	•	_	. ,					
	1) Notice	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informa					

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-4, 7-11, 14-16, 19-21, 24, 25, 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kano et al (US 6,242,719).

Kano et al anticipates the ceramic heater claimed including a disc-shaped ceramic substrate made of a nitride ceramic, a resistance heating element made of metal arranged on a surface of the ceramic substrate, an insulating layer made of oxide glass such as silica covering the heating element.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US 6,072,162) in view of Nobori et al (US 5,616,024) or Kano et al (US 6,242,719) and Allen (US 4,057,707) or Mio et al (US 4,536,645).

Ito et al shows the ceramic heater claimed including an AlN ceramic substrate, a resistant heating element comprising one or more circuits on a surface of the ceramic substrate, the ceramic heater having through holes for accommodating lifting pins to lift a wafer. However, Ito et al does not show the ceramic substrate is a disc-formed and the insulating covering over the heating element.

Nobori et al and Kano et al show ceramic heaters having a disc-shaped ceramic substrate with a resistant heating element used for heating a semiconductor wafer.

Allen shows a ceramic heater having a ceramic substrate having a heating element with an insulation layer comprising oxide glass material that covers the heating element. Mio et al also shows a heating element having an insulation layer made of an oxide ceramic material such alumina or a resin material such as silicone resin.

In view of Nobori et al or Kano et al, it would have been obvious to one of ordinary skill in the art to adapt Ito et al with the ceramic substrate in a disc-shape to accommodate the wafers that conventionally manufactured in the disc-shape and to further uniformly heat the disc-shaped wafers in a disc-shaped ceramic heater; and in view of Allen or Mio et al, it would have been obvious to one of ordinary skill in the art to insulate the heating element so that the heating element is physically and electrically insulated or protected from exterior environment.

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With respect to claims 28 and 29, Kano et al and Allen show that it is known in the art to

make the heating element with metal or metal particles since metals provide the necessary

electric resistance to produce power or heating. In view of Kano et al or Allen, it would have

been obvious to one of ordinary skill in the art to adapt Ito et al with the heating element having

metal or metal particles to provide the electrically resistance in the heating element to produce

the power or heating that is necessary to treat the desired objects including wafers.

Response to Arguments

5. Applicant's arguments with respect to claims 1-29 have been considered but are moot in

view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sang Y Paik whose telephone number is 703-308-1147. The

examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Teresa Walberg can be reached on 703-308-1327. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9302 for regular

communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0861.

5.8

Sang Y Paik Primary Examiner Art Unit 3742

syp

February 27, 2003